

## Patent Claims

1. A thermal insulation composite, comprising two metal sheets with a thermally insulating core material, wherein a fire-protection layer has been introduced between the thermally insulating core material and at least one of the metal sheets.  
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2. The thermal insulation composite according to claim 1, wherein the fire-protection layer comprises an intumescent composition based on an alkali metal silicate, expandable graphite, or expandable mica.  
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3. The thermal insulation composite according to claim 2, wherein the intumescent composition comprises a hydrous sodium silicate.
4. The thermal insulation composite according to any of claims 1 to 3, wherein the metal sheet is composed of steel or of aluminum.  
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5. The thermal insulation composite according to any of claims 1 to 4, wherein the thermally insulating core material is composed of molded polystyrene foam, of extruded polystyrene foam sheets, of polyurethane foams, or of mineral wool.  
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6. A process for producing a thermal composite via bonding of two metal sheets and of a thermally insulating core material, which comprises introducing a fire-protection layer between the thermally insulating core material and at least one metal sheet.  
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7. The process according to claim 6, wherein the core material is coated on at least one surface with an intumescent composition to form the fire-protection layer, and is then adhesive-bonded to the metal sheets.
- 30 8. The process according to claim 6, wherein the core material is adhesive-bonded to the metal sheets with an adhesive comprising the intumescent composition.
9. The use of the thermal insulation composite according to any of claims 1 to 6 for the production of storage buildings or of cold-store buildings.